

REMARKS

Applicants thank the Examiner for total consideration given the present application. Claims 12-22 were pending prior to the Office Action. Claims 23-33 have been added through this Reply. Therefore, claims 12-33 are currently pending. Claims 12, 22, 23, and 33 are independent. Claims 12 and 22 have been amended through this Reply. Applicants respectfully request reconsideration of the rejected claims in light of the amendment and remarks presented herein, and earnestly seek timely allowance of all pending claims.

35 U.S.C. § 102 REJECTION – Ito, Tomizawa

Claims 12, 16, 18 and 22 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Ito et al. (U.S. Patent Publication No. 2001/0015845)[hereinafter "Ito"]. Claims 12-14, 16, 18, and 22 are rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Tomizawa et al. (U.S. Patent Publication No. 2003/0118345)[hereinafter "Tomizawa"].

Applicants respectfully traverse these rejections.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02.* Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, both Ito and Tomizawa fail to teach or suggest each and every claimed element.

For example, independent claims 12 and 22 recite, *inter alia*, “a plurality of discriminators that respectively outputs discrimination results by discriminating the electrical signals output from the optical-to-electrical converters **based on predetermined thresholds, wherein said predetermined thresholds** imparted to the plurality of discriminators **are determined according to a predetermined logical operation.**” *Emphasis added.*

It is respectfully submitted that neither Ito nor Tomizawa teaches or suggests the above-identified claim feature of claims 12 and 22.

Ito is directed to a conventional optical communication receiver which includes, among other features, an optical divider 6 for dividing a signal light into a plurality of components, a plurality of photoelectric converters 1, a plurality of code decision units 3, a clock extractor 7, and an OR circuit 5. (See Fig. 8 and paragraph [0042]-[0043].)

Ito is distinguished from the claimed invention in that the code decision units 3 do not output discrimination results by discriminating the electrical signals output from the photoelectric converters 1 based on predetermined thresholds, wherein said predetermined thresholds imparted to the code decision units 3 are determined according to a predetermined logical operation of the OR circuit 5. Rather, Ito discloses that the plurality of code decision units 3 is used for code discrimination. (See paragraph [0034].) Indeed, the entire reference is silent on whether such code discrimination is performed based on predetermined thresholds.

Therefore, for at least these reasons, independent claims 12 and 22 are distinguishable from Ito. Claims 16 and 18 depend from claim 12, directly or indirectly. Therefore, for at least the reasons stated with respect to claim 12, claims 16 and 18 are also distinguishable from Ito.

Tomizawa discloses in FIG. 1, that optical signals are converted into electrical signals by a photo detector 1. These electrical signals are then distributed to a plurality of series by a distribution circuit 2, and are input respectively into decision circuits 3-11 to 3-1n for a threshold value 1, decision circuits 3-21 to 3-2n for a threshold value 2, and decision circuits 3-k1 to 3-kn for a threshold value k. Namely, if n number of decision circuits for the same threshold value are taken as 1 set, the electrical signals can be distributed to the decision circuits of k sets. The number of distributions is the product (i.e., nxk) of the number n of decision circuits having the same threshold value with the types k of threshold values. The decision result of each decision circuit is input into a control circuit 4, and the decision result of at least one decision circuit from each set is input into a selection circuit 5. The control circuit 4 controls the selection circuit 5 based on the decision result of each decision circuit, and selects and outputs the decision result of one decision circuit. (See paragraph [0035] and Fig. 1.)

Tomizawa, however, fails to disclose that the decision circuits (3-11 to 3-1n; 3-21 to 3-2n; 3-k1 to 3-kn) output discrimination results by discriminating the electrical signals output

from the photodetectors 1 based on predetermined thresholds, wherein said predetermined thresholds imparted to the decision circuits (3-11 to 3-1n; 3-21 to 3-2n; 3-k1 to 3-kn) are determined according to a predetermined logical operation of the selection circuit 5. Although Tomizawa discloses that the decision circuits 3-11 to 3-1n, 3-21 to 3-2n, 3-k1 to 3-kn have threshold values 1, 2, k, respectively, nowhere does Tomizawa teach or suggest that such threshold values are determined according to a predetermined logical operation of the selection circuit 5.

Therefore, for at least these reasons, independent claims 12 and 22 are distinguishable from Ito or Tomizawa. Claims 13, 14, 16 and 18 depend from claim 12, directly or indirectly. Therefore, for at least the reasons stated with respect to claim 12, claims 13, 14, 16 and 18 are also distinguishable from Tomizawa.

Accordingly, Applicants respectfully request the withdrawal of the rejection of claims 12-14, 16, 18, and 22.

35 U.S.C. § 103 REJECTION – Ito, Tomizawa, Naito, Sawada, Tago, Hayee

Claim 15 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tomizawa in view of Naito et al. (U.S. Patent No. 5,052,051)[hereinafter “Naito”]. Claim 17 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tomizawa in view of Sawada et al. (WO 03/026239-US Patent Publication No. 2004/0131368)[hereinafter “Sawada”] in view of Tago (US Patent Publication No. 2004/0165895)[hereinafter “Tago”]. Claim 19 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tomizawa in view of Hayee et al. (US Patent No. 7,209,671)[hereinafter “Hayee”]. Claims 20 and 21 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tomizawa in view of Tago and Hayee.

Applicants respectfully traverse these rejections.

Claims 15, 17, 19, 20 and 21 depend from claim 12, directly or indirectly. As demonstrated above in great detail, neither Ito nor Tomizawa teaches or suggests, *inter alia*, “a plurality of discriminators that respectively outputs discrimination results by discriminating the electrical signals output from the optical-to-electrical converters based on predetermined

thresholds, wherein said predetermined thresholds imparted to the plurality of discriminators are determined according to a predetermined logical operation” as recited in claim 12. *Emphasis added.*

Naito, Sawada, Tago, and Hayee have not been, and indeed cannot be relied upon to fulfill the above-noted deficiency of Ito or Tomizawa.

Therefore, Applicants respectfully request the withdrawal of the rejection of claims 15, 17, 19, 20 and 21 for at least the same basis asserted above with regards to independent claim 12.

NEW CLAIMS

New independent claims 23 and 33 recite a method corresponding to independent claims 12 and 22, respectively, which recite, *inter alia*, “wherein said predetermined thresholds imparted to the plurality of discriminators are determined according to a predetermined logical operation.” Thus, claims 23 and 33 are distinguishable from the applied prior art references at least for the same basis asserted above with regards to independent claims 12 and 22. New claims 24-32 are distinguishable from the applied prior art references by virtue of their dependency on claim 23.

CONCLUSION

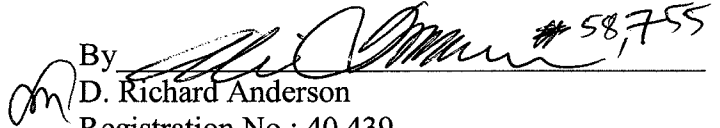
All rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claims does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ali M. Imam Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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